

Create your own custom storage system in one weekend

You can drop a lot of cash on garage storage systems. Shelves, tool racks, special hooks, and other odds and ends can really add up. Our homemade system gives you the versatility of those store-bought systems without the big price tag. Our materials cost for the whole system you see here, covering 16 ft. of wall, was

about \$200. It'll be even cheaper if you have scrap plywood and other common materials lying around.

This system is so simple and fast to build that even a beginning DIYer can complete it in a weekend. You'll find everything you need at home centers or hardware stores. And the system is completely customizable to your specific garage and gear—you can easily move or add accessories by driving in a few screws. Transform your cluttered garage into one so organized you'll be the envy of the neighborhood.

by Elisa Bernick editors@thefamilyhandyman.com

Start with struts

ach of these storage accessories → hangs from a simple framework of vertical struts, which are just 2x2s screwed to the garage wall studs. If you use struts, you can hang something on the wall without hunting for studs, and you can screw shelf brackets and accessory hangers to the sides of them. Of course, if you have bare stud walls, you can skip the struts. We used 2x2s rather than 2x4s because they cost slightly less and have fewer knots. Just be sure you screw them in every 16 in. for extra strength. Most home centers sell 2x2s in 8-ft. lengths.

Shorten or lengthen the struts to suit your garage. If you go with 6-footers like we did, you can use the leftover 2x2 scraps to build some of the accessories described in this article. It doesn't matter if the struts are centered 16 in. or 24 in. apart. Just make sure they're plumb by using a level.



Screw 2x2 struts to each wall stud. Snap a chalk line to align the tops of the struts and mark the stud locations with masking tape. Drill pilot holes or use "self-drilling" screws to avoid splitting the struts.

thefamilyhandyman.com

Hang bikes, ladders, wheelbarrows and other clutter. Find out how at thefamilyhandyman.com/storagesolutions.

Strong, low-cost hooks

Plumbing hooks are designed to support pipes, but they make great storage hooks too. We used them to hold ladders, sports gear and wheelbarrows. You can easily cut them to length if space is tight. They're sized for pipe ranging from 1/2 in. to 4 in. and cost 25¢ to 80¢ apiece.



Yard tool rack



eed trimmers and leaf blowers can slide around if you prop them in a corner, and fall off the wall if you try to hang them from a hook. Solve the problem with this custom storage rack, which uses 3/4-in. plywood for the brackets, top and back. Cut two 8-in. x 11-in. brackets to support the top and back of the rack. Our rack is 34 in. long and 12 in. deepcustomize the dimensions to fit your yard tools. To determine the best shape for your slots, measure the diameter of your tools and cut basic slots in the top of the rack. Then play with the shape of your slots to get a snug fit.

Continued on p. 39



Cut basic slots in the top of the rack and test-fit the tool. Enlarge the slot or change its shape until the tool hangs securely.

Shelf brackets



etal shelf brackets seem inexpensive (less than \$1 each), but the cost can add up quickly if you're installing several shelves. So why not make free brackets from plywood scraps? We created a simple, flexible and inexpensive shelving system using 3/4-in. plywood brackets screwed to the vertical framework. We used 3/4-in. plywood rather than 1/2-in. because it gives you a wider surface to screw into when attaching the shelves to the brackets.



Cut shelf brackets from scrap plywood. Cut the scraps into rectangles first, using a table saw or circular saw. That keeps time-consuming jigsaw cuts to a minimum.

For shelves, we used 3/4-in. birch plywood, but you could use 1x12s or melamine-coated particleboard, or you could edge-band the plywood for a more finished look. Screw a bracket at each strut to support the shelves. You can put shelving across the entire length of the wall or stack shorter

shelves on top of each other (or do both, as we did). The 1-1/2-in.-wide brackets are surprisingly strong and will easily hold 100 lbs. or more.

thefamilyhandyman.com

Organize tools and gardening gear. Find out how at thefamilyhandyman.com/organizegarage.

Vinyl gutter storage bins



en-foot lengths of vinyl gutter (\$5 at home centers) screwed to the 2x2 framework are a perfect place to store long items like hockey sticks, fishing rods, dowels, wood trim and corner bead. Items like these often end up leaning against a wall or taking over an entire corner only to tumble over or get wrecked because they're not really supposed to be stored on end.

Shorter sections of vinyl gutter and sturdy window box liners (\$7 to \$10 at home and garden centers) attached the same way work well for storing hard-to-hang items like gloves, hose nozzles, fertilizer spikes and sprayers. And people who *refuse* to hang stuff back up on the wall can just toss it into the bin. If the gutter end caps don't fit snugly, apply PVC cement, silicone or gutter adhesive and press firmly.

Vinyl gutters are surprisingly sturdy—you can even store a few sections of rebar and metal pipe in them without a problem. Metal gutter is also an option. It's the same price, but it's harder to cut and too flimsy for heavier items.



Cut vinyl gutter sections to length with a miter saw. You can use a handsaw, but you'll need to mark the cut carefully to get it square.

Long-handled tool storage



ypical brackets for storing long-handled tools stack the tools one on top of another. This is definitely an efficient use of wall space, but it's frustrating to move other tools out of the way to reach the one you're after. Or you end up devoting an entire wall to hooks that hang individual items.

Here's a better solution. Screw a pair of 3/4-in. plywood brackets to a chunk of scrap 2x2. Attach several 16d finish nails to the side of each bracket and screw the bracket assembly to the 2x2 framework. Drill holes into each of your tool handles, and you can easily hang and retrieve individual rakes and shovels without using up a lot of wall space.



Drill holes in your tool handles. Then taper the holes with a countersink bit so the tools will slip easily on and off nails.

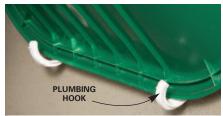


Slip the bracket over the strut and screw it into place. Be sure to drive nails into the bracket's outside edge *before* you install it. Leave 1-1/2 in. of the nails exposed to hang tools.

Wheelbarrow storage hub



ere's a slick way to get your wheelbarrow off the garage floor: To start, screw two plumbing hooks to the wall (we used 1-1/2-in. hooks). Tilt the wheelbarrow onto the hooks and up against the wall. Drill a pilot hole and then drive in a screw hook to hold the wheelbarrow upright. To release the wheelbarrow, just turn the hook.

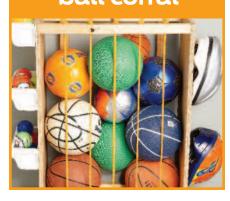




thefamilyhandyman.com

Give your garage floor a gorgeous epoxy paint job. Step-by-step instructions at thefamilyhandyman.com/garageepoxy.

Kid-friendly ball corral



his sturdy ball corral holds a herd of balls and lets kids easily grab the balls at the bottom without unloading all the ones on top. It's built from 3/4-in. plywood and 2x2s. We made our ball corral 24 in. wide x 33 in. high x 12 in. deep.

The hooks on Bungee cords can be a safety hazard for kids and adults alike. So cut the hooks off the cords (or use elastic cord available at camping. sporting goods and hardware stores). Thread the cord through predrilled holes and secure with knots. Drill the holes slightly larger than the cords to make threading them easier.

We added plumbing hooks and short gutter troughs on the outside of the corral to make it easy for kids to stash smaller balls, helmets and mitts.



Hose and sprinkler bucket



toring hoses and cords on thin hooks or nails can cause them to crack or lose their shape. Five-gallon buckets fitted with a scrap of 3/4-in. plywood in the bottom and then screwed to the wall make great multipurpose holders. The plywood can be any shape, but to give it a more finished look, cut a circle slightly smaller than the diameter of the bucket. For another hose and extension cord hanger, see p. 86.



Mount the bucket by driving screws through plywood. Without plywood, the screws will pull through the bottom of the bucket.

We want your feedback!

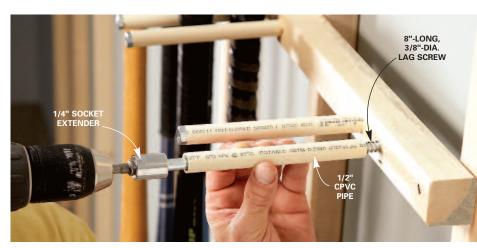
Help us improve The Family Handyman by sharing your opinion of this and other articles. See p. 2 for details.

Sports gear rack



pecialty gear hooks and bat racks run \$15 to \$25 a pop. Vinyl-covered utility hooks only cost \$2, but they only hold single items. Each of these inexpensive sports gear hangers will hold several bats and racquets.

Each set of hangers is made from a pair of lag screws covered with CPVC sleeves to protect the gear. Customize the hangers by spacing them closer or wider apart depending on what you want to hang.



Screw a scrap of 2x2 to the face of a vertical 2x2 to hold the hangers. Slip a 6-in. length of 1/2-in. CPVC or PVC pipe over an 8-in.-long, 3/8-in.-diameter lag screw. This CPVC sleeve will prevent the lags from scratching the sports gear.